SAFETY DATA SHEET

This Safety Data Sheet (SDS) complies with the requirements of the American National Standards Institute (Z400.1, 1998), U.S. Federal Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200), and equivalent state Standards. It has also been developed in accordance with the Canadian Workplace Hazardous Materials Standard and the United Nations Globally Harmonized System of Classification of Chemicals. Refer to Section 16 of this document for the definition of terms and abbreviations.

1. PRODUCT IDENTIFICATION

PRODUCT: **CALCIUM HARDNESS TABLETS**
PRODUCT CODE: **B0245**
PRODUCT USE: Maintenance of Pools and Spas
USES ADVISED AGAINST: Any off-label use.
MANUFACTURER/ SUPPLIER/DISTRIBUTOR: **Valterra Products, LLC**
ADDRESS: 15230 San Fernando Mission Blvd.; Suite 107
Mission Hills, CA 91345
BUSINESS PHONE #: 818-898-1671
EMERGENCY PHONE #: CHEMTREC:1-800-255-3924; 1-703-527-3887

These products are sold to consumers in containers of relatively small volume. This SDS has been developed to address safety concerns affecting those individuals working in warehouses and other places where large numbers of these containers are stored, as well as those affecting potential users of this product in industrial /occupational or manufacturing settings.

2. HAZARD IDENTIFICATION

GLOBALLY HARMONIZED SYSTEM (GHS) REVIEW:

GHS HAZARD CLASSIFICATION: Acute Toxicity- Oral (Category 4); Eye Irritation (Category 2A).

LABELING:

- **Pictogram:** To the right -

- **Signal Word:** Warning.
- **Hazard Statement**: Harmful if swallowed. Causes serious eye irritation.
- **Precautionary Statements:** Keep out of reach of children. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye/face protection.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

Health	**1***
Flammability	**0**
Physical Hazard	**0**
Protective Equipment	**B**

* As anticipated, in tablet form and coated. Caution should be taken with broken tablets ad dust; corrosive eye and skin damage is possible if there is prolonged contact.

HMIS Personal Protective Equipment Rating: Occupational Use situations: B - Safety glasses and gloves (if skin or eye contact is a possibility)

HAZARDOUS NOT OTHERWISE CLASSIFIED:

- **Aquatic Toxicity Classification**: Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	GHS HAZARD CLASSIFICATION	W/W%
Lithium Hydroxide	1310-65-2	Acute Toxicity- Oral (Category 4); Eye Irritation (Category 2A)	10
Sodium Carbonate	497-19-8	Eye Irritation (Category 2A)	10-15
None of the other constituents of this product contribute health or physical hazard at the concentrations present in the mixture.			Balance

4. FIRST AID MEASURES

FIRST AID:

- **Eyes:** Hold contaminated eyes open and flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Seek medical attention if eye irritation occurs.
- **Skin:** Flush area with warm, running water. Continue rinsing with water for at least 15 minutes, if any evidence of redness or irritation occurs. Seek medical attention if skin irritation persists.
- **Inhalation:** Obtain fresh air. If necessary, blow nose. Seek medical attention if irritation occurs.
- **Ingestion:** If it is accidentally ingested, rinse mouth. Contact professional medical personnel or the local poison control center for additional guidance.

ACUTE HEALTH EFFECTS:

- **Eyes:** Serious eye irritation can occur upon contact with dusts or particulates of the tablet.
- **Skin:** Skin irritation may occur upon contact with dusts or particulates of the tablet.
- **Inhalation:** Inhalation of particulates may cause l irritation.
- **Ingestion:** In the event this product is swallowed, irritation of the nose, throat, and digestive tract can occur. Ingestion may cause nausea, vomiting, and diarrhea. It may also present a choking hazard.

CHRONIC HEALTH EFFECTS: None reported.

TARGET ORGANS: Eyes.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: None reported.

5. FIRE-FIGHTING MEASURES

NFPA FLAMMABILITY CLASSIFICATION: Not flammable. See symbol to right.

RECOMMENDED FIRE EXTINGUISHING MEDIA: Water Spray, Water Jet, Dry Powder, Foam, Carbon Dioxide, or any other.

UNSUITABLE FIRE EXTINGUISHING MEDIA: None known.

UNUSUAL HAZARDS IN FIRE SITUATIONS: When involved in a fire, this material may produce very irritating vapors and toxic gases (e.g., lithium and sodium compounds, carbon oxides).

RECOMMENDATIONS TO FIREFIGHTERS: Wear Self Contained Breathing Apparatus and full protective equipment for fire response. Move containers from fire area if it can be done without risk to personnel. Contaminated equipment should be rinsed thoroughly with water before returning to service.

6. ACCIDENTAL RELEASE MEASURES

RESPONSE TO INCIDENTAL RELEASES: In the event of a release, wear gloves and safety glasses when cleaning-up spills.

RESPONSE TO NON-INCIDENTAL RELEASES: As needed, respond to non-incidental chemical releases of this product (such as the simultaneous destruction of several pallets of product) by evacuating the impacted area and contacting appropriate emergency personnel. Due to the non-hazardous nature of the product, follow the procedures for Response to Incidental Releases specified above.

RESPONSE PROCEDURES FOR ANY RELEASE: Sweep up spilled solid. Use a damp sponge/polypad to carefully cleanse the contaminated area or items. If appropriate, further clean the contaminated area and equipment with a soap and water solution, followed by a water rinse.

SPILL RESPONSE EQUIPMENT: Broom and dustpan. Polypad or other absorbent material, if needed.

ENVIRONMENTAL PRECAUTIONS: Avoid response actions that can cause a release of a significant amount of the substance into the environment.

REFERENCES TO OTHER SECTIONS:

- See Section 8 (Exposure Controls/Personal Protection) for personal protective equipment recommendations.
- See Section 13 (Disposal Recommendations) for information on waste disposal.

7. HANDLING AND STORAGE

HYGIENE PRACTICES: Keep out of reach of children**.** Do not smoke, drink, eat, or apply cosmetics in the chemical use area. Avoid inhalation of dusts and particulates. Use in well-ventilated area. Avoid contact with skin or eyes. Remove contaminated clothing promptly. Clean up any spilled product immediately.

HANDLING RECOMMENDATIONS: Avoid contact when handling.

INCOMPATIBILITIES: See Section 10 (Stability and Reactivity).

STORAGE RECOMMENDATIONS: Ensure all containers are correctly labeled. Store container in cool, dry place away from direct sunlight, sources of intense heat, or where freezing is possible. Store this product away from incompatible chemicals (See Section 10, Stability and Reactivity).

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures).

SPECIFIC END USES: Vehicle cleaning and maintenance.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

U.S. NATIONAL EXPOSURE LIMITS: There are no airborne occupational exposure limits that have been established for components of this product listed in Section 3.

BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS: Not established.

ENGINEERING CONTROLS: Use this product in well-ventilated environment.

RESPIRATORY PROTECTION: None needed under routine circumstances of use.

HAND PROTECTION: Rubber, latex, or neoprene gloves should be used when prolonged contact is anticipated.

EYE PROTECTION: Splash goggles or safety glasses with side shield are recommended if contact with the product is anticipated.

BODY PROTECTION: None needed under typical situations of use or handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid; tablets (100 mg).
COLOR: Light pink with specks.
ODOR: Odorless.
pH: 12 (1 tablet in 10 mL water).
BOILING POINT: Not determined.
MELTING POINT: Not determined.
REFRACTIVE INDEX: Not determined.
VISCOCITY: Not determined.
FLASH POINT: Not applicable.
LOWER EXPLOSIVE LIMIT (LEL): Not applicable.
UPPER EXPLOSIVE LIMIT (UEL): Not applicable.
AUTOIGNITION TEMPERATURE: Not applicable.
VAPOR PRESSURE: Not determined.
VAPOR DENSITY (air = 1): Not determined.
RELATIVE DENSITY (water = 1): Not determined.
EVAPORATION RATE (water = 1): Not determined.
COEFFICIENT OIL/WATER DISTRIBUTION (PARTITION COEFFICENT): Not established.
SOLUBILITY: Soluble in water.
EXPLOSIVE PROPERTIES: Not applicable.
OXIDIZING PROPERTIES: Not applicable.
VOLATILE ORGANIC COMPOUNDS: Not applicable.

10. STABILITY AND REACTIVITY

RELATIVE STABILITY (AT STANDARD TEMPERATURES AND PRESSURES): Normally stable.

INCOMPATIBILITIES: Strong acids.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS CHEMICAL DECOMPOSITION PRODUCTS: Products of thermal decomposition include very irritating vapors and toxic gases (e.g., carbon oxides, sodium and lithium compounds).

CONDITIONS TO AVOID: Avoid contact with incompatible chemicals.

11. TOXICOLOGY INFORMATION

ACUTE TOXICITY:

- **PRODUCT ACUTE TOXICITY ESTIMATES:**

  ATE (Oral): 990 mg/kg
- **COMPONENT TOXICOLOGY DATA:** The following data are available for components of this product.

LITHIUM HYDROXIDE
LD50 (Oral, Mouse) = 363 mg/kg
LD50 (Oral, Rat) = 210 mg/kg
LC50 (Inhalation, Rat) = 4 hours, 3.4 mg/m^3

SODIUM CARBONATE
LD50 (Oral, Rat) = 4,090 mg/kg
LC50 (Inhalation, Rat) = 2 hours, 2,300 mg/m^3

- **DEGREE OF IRRITATION:** The product cause serious eye irritation. In the unusual case of prolonged contact with broken tablets, especially particulates or dusts, corrosive damage may occur.
- **SENSITIZATION:** The components of this product are not reported to cause respiratory or skin sensitization.
- **REVIEW OF ACUTE SYMPTOMS AND EFFECTS BY ROUTE OF EXPOSURE:** See Section 2 (Hazards Information) and Section 4 (First Aid Measures) for additional details. t

Eyes	Causes serious eye irritation.
Skin	May cause skin irritation, especially upon prolonged contact.
Inhalation	May cause irritation to exposed tissues.
Ingestion	May be harmful if swallowed.

CHRONIC TOXICITY:

- **CARCINOGENICITY STATUS:** The following table summarizes the carcinogenicity listing for the components of this product. "NO" indicates that the substance is not considered to be, or suspected to be, a carcinogen by the listed agency

CHEMICAL	IARC	NTP	NIOSH	OSHA	OTHER
Lithium Hydroxide	NO	NO	NO	NO	NO
Sodium Carbonate	NO	NO	NO	NO	NO

- **REPRODUCTIVE TOXICITY INFORMATION:** This product is not known to cause any adverse effect on the human reproductive system.
- **TOXICOLOGY DATA:** No data are available for components of this product present in greater than 1 percent concentration.
- **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
- **MUTAGENIC EFFECTS:** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE:** Not applicable.
- **SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE:** Not applicable.
- **ASPIRATION HAZARD**: Not applicable.

12. ECOLOGICAL INFORMATION

TOXICITY TO TERRESTRIAL LIFE: Based on available data, this may be harmful to contaminated plants or animals.

TOXICITY TO AQUATIC LIFE Based on available data, this may be harmful or fatal to contaminated aquatic plants or animals.

COMPONENT AQUATIC TOXICITY DATA: The following data are available for components of this product.

SODIUM CARBONATE
LC50 (Lepomis macrochirus) - 300 mg/L - 96 hours
LC50 (Pimephales promelas) – 310-12200 mg/L - 96 hours
EC50 (Daphnia magna) - 265 mg/L - 48 hours
EC50 (Nitzschia)- 242 mg/L - hours

MOBILITY, PERSISTENCE, AND DEGRADABILITY: The components of the product are ultimately biodegradable. Good hygiene practices should be implemented to prevent all accidental releases to the environment.

BIOACCUMULATION AND BIOCONCENTRATION POTENTIAL: It is not anticipated that this product will bioaccumulate or bioconcentrate significantly in the environment.

13. DISPOSAL CONSIDERATIONS

WASTE HANDLING RECOMMENDATIONS: Prepare, transport, treat, store, and dispose of waste product according to all applicable local, U.S. State and U.S. Federal regulations, and the applicable Canadian standards.

EPA RCRA WASTE CODE: Not applicable.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS SHIPPING REGULATIONS:

PROPER SHIPPING NAME: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (<10% Lithium Hydroxide mixture).
HAZARD CLASSIFICATION: 8.
UN/NA IDENTIFICATION NUMBER: UN 3262.
PACKING GROUP: III.
LABEL: 8 (Corrosive).

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK (2016): Not applicable.

OTHER PERTINENT TRANSPORTATION REGULATIONS:

MARINE POLLUTANT STATUS: No component is designated as a DOT Marine Pollutant.

CANADIAN TRANSPORTATION INFORMATION: This product is regulated by Transport Canada as dangerous goods under Canadian transportation standards.

IATA DESIGNATION: This product is regulated as dangerous goods by the International Air Transport Association.

IMO DESIGNATION: This product is regulated as dangerous goods by the International Maritime Organization. See previous information for shipping information

15. REGULATORY INFORMATION

OTHER IMPORTANT U.S. REGULATIONS

CERCLA REPORTING REQUIREMENTS: Not applicable.

SARA REPORTING REQUIREMENTS: The following reporting requirements are applicable to the components of this product:

CHEMICAL	SECTION 302 (40 CFR 355 Appendix A)	SECTION 304 (40 CFR Table 302.4)	SECTION 313 (40 CFR 372.65)
Lithium Hydroxide	NO	NO	NO
Sodium Carbonate	NO	NO	NO

SARA SECTION 311/312 FOR PRODUCT: Acute Toxicity; Eye Damage/Irritation.

TSCA INVENTORY STATUS: All components of this product are listed on the TSCA Inventory.

CALIFORNIA SAFE DRINKING WATER ACT (PROPOSITION 65) STATUS: No component of this product is known to the State of California to cause cancer or other reproductive harm.

INTERNATIONAL REGULATIONS

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are listed on the DSL/NDSL Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITY SUBSTANCES LISTS: The components of this product are not on the CEPA Priorities Substances Lists.

CANADIAN WHMIS CLASSIFICATION: See section 2.

16. OTHER INFORMATION

DATE/ SDS PREPARATION: January 28, 2020.

DATE/ SDS REVISION: New.

CHANGE INDICATED: Prepared according to the regulations of the United States and Canada.

DEFINITION OF TERMS AND ABBREVIATIONS:

- **ALL SECTIONS:** OSHA: U.S. Federal Occupational Safety and Health Administration. WHMIS: Canadian Workplace Hazardous Materials Standard. GHS: Globally Harmonized System of Classification of Chemical Substances.
- **SECTION 2:** HAZARDOUS MATERIALS IDENTIFICATION SYSTEM RATING: This is a rating system used by industry to summarize physical and health hazards to chemical users and was originally developed by the National Paint and Coating Association. 0 = No Significant Hazard. 1 = Slight Hazard. 2 = Moderate Hazard. 3 = Severe Hazard. 4 = Extreme Hazard.
- **SECTION 3:** CAS Number: Chemical Abstract Service Number, which is used by the American Chemical Society to uniquely identify a chemical.
- **SECTION 5:** NFPA: National Fire Protection Association. NFPA FLAMMABILITY CLASSIFICATION: The NFPA uses the flash point (Fl.P.) and boiling point (BP) to classify flammable or combustible liquids. Class IA: Fl.P. below 73°F and BP below 100°F. Class IB: Fl.P. below 73°F and BP at or above 100°F. Class IC: Fl.P. at or above 73°F and BP at or above 100°F. Class II: Fl.P. at or above 100°F and below 140°F. Class IIIA: Fl.P. at or above 140°F and below 200°F. Class IIIB: Fl.P. at or above 200°F. NFPA HAZARDOUS MATERIALS RATING: This is a rating system used to summarize physical and health hazards to firefighters. 0 = No Significant Hazard. 1 = Slight Hazard. 2 = Moderate Hazard. 3 = Severe Hazard. 4 = Extreme Hazard
- **SECTION 8:** NE: Not established. ACGIH: American Conference of Government Industrial Hygienists; TWA: Time-Weighted Average (over an 8-hour work day); STEL: Short-Term Exposure Limit (15-minute average, no more than 4-times daily and each exposure separated by one-hour minimally); C: Ceiling Limit (concentration not to be exceeded in a work environment). PEL: Permissible Exposure Limit. NIOSH: National Institute of Occupational Safety and Health; REL: Recommended Exposure Limit; IDLH: Immediately Dangerous to Life and Health Concentrations. *Note*: In July 1992, a court ruling vacated the more protective PELs set by OSHA in 1989. Because OSHA may enforce the more protective levels under the "general duty clause", both the current and vacated levels are presented in this document. ppm: Parts per Million. mg/m^3: Milligrams per cubic meter. mppcf: Millions of Particles per Cubic Foot. BEI: Biological Exposure Limit.
- **SECTION 9:** pH: Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, pH of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. FLASH POINT: Temperature at which a liquid generates enough flammable vapors so that ignition may occur. AUTOIGNITION TEMPERATURE: Temperature at which spontaneous ignition occurs. LOWER EXPLOSIVE LIMIT (LEL): The minimal concentration of flammable vapors in air which will sustain ignition. UPPER EXPLOSIVE LIMIT (UEL): The maximum concentration of flammable vapors in air which will sustain ignition.
- **SECTION 11:** CARCINOGENICITY STATUS: NTP: National Toxicology Program. IARC: International Agency for Research on Cancer. REPRODUCTIVE TOXICITY INFORMATION: Mutagen: Substance capable of causing chromosomal damage to cells. Embryotoxin: Substance capable of damaging the developing embryo in an overexposed female. Teratogen: Substance capable of damaging the developing fetus in an overexposed female. Reproductive toxin: Substance capable of adversely affecting male or female reproductive organs or functions. TOXICOLOGY DATA: LD*xx* or LC*xx*: The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (*xx*) of exposed test animals by the designate route of administration. This value is used to assess the toxicity of chemical substances to humans. TD*xx* or TC*xx*: The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (*xx*) of exposed test animals by the designate route of administration.
- **SECTION 13:** RCRA: Resource Conservation and Recovery Act. The regulations promulgated under this act under Act are found in 40 CFR, Sections 260 ff, and define the requirements of hazardous waste generation, transport, treatment, storage, and disposal. EPA RCRA Waste Codes: Defined in 40 CFR Section 261.
- **SECTION 15:** CERCLA: Comprehensive Environmental Response Compensation and Liability Act (a.k.a. "Superfund") and SARA: (Superfund Amendment and Reauthorization Act). TSCA: Toxic Substances Control Act. The regulations promulgated under this Act are located under 40 CFR 300 ff. and provide "community right-to-know" requirements. DSL/NDSL: Canadian Domestic Substances and Non-Domestic Substances Lists.